Spacers for the HXTU - 1.4 % slope

Goal: Design spacers at CERN, in order to install the HXTU set-up on a 1.4% slope.
If we consider that the feed-box will be the lowest point, we need to add extra spacers underneath the 4 modules and the turnaround external supports.

Information
The sketch (figure1) names each external support along the HXTU.

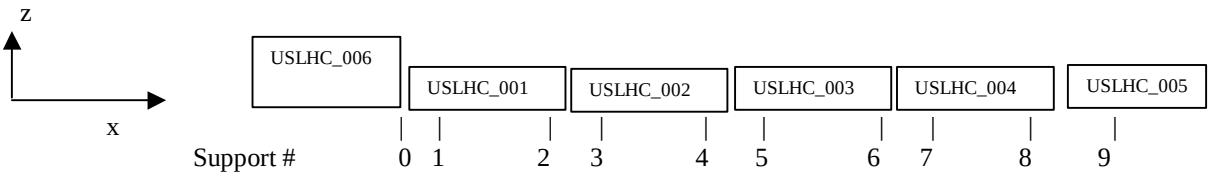

Figure 1

The reference 0, is given by the feed-box interface (beginning of the HX corrugated), see ***figure 2.***

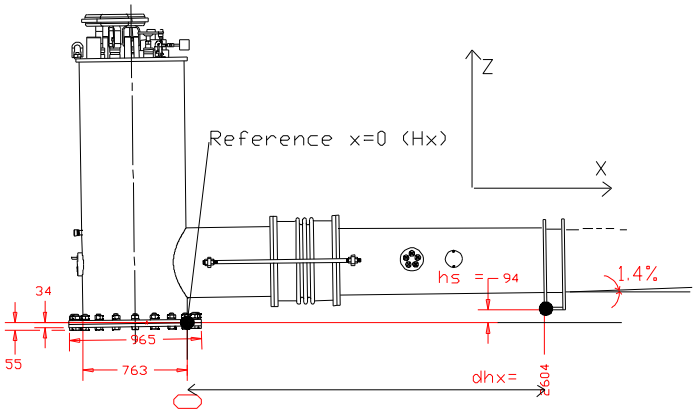

Figure 2

We consider that:
- **dhx** is the distance from this reference to the given support # (figure 2),
- **hs** is the minimum height for which each support should be raised. (figure 3).

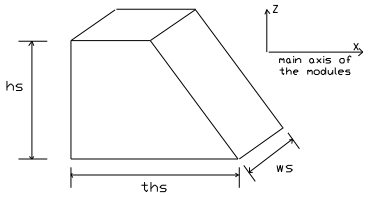

Figure 3

For stability reason, ths and ws, should be of the order of:
> (152+hs) mm for ths ,
> 560 mm for ws .
(see support dwg #364002)
Note: Figure 3 is only for information..

Furthermore, the bolted Feed-box button plate, should not be directly in contact with the floor. It could be supported by a cylinder, OD 763 mm (see figure 1).

Table 1 gathers the 9 values , dhx and hs.

Support #	dhx [mm]	hs [mm]
FB	0	-
1	2604	94
2	6519	149
3	10129	199
4	14044	254
5	17653	305
6	21568	359
7	25178	410
8	29093	465
9	31408	497

Table1.

To design and manufacture at CERN:

- 1 Support for the Feed-box.
- 9 spacers to raise the HXTU.